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AUTHOR Zakir Khouj, Abdullah Mohammad; Ahmed Shami, Mohammad Ansar

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ABSTRACT

The relationship between course loads of students and their grade point average (GPA) was studied at the Makkah Campus of Umm Al-Qura University, Saudi Arabia. Students from all six departments of the college of Shariah whose course loads were between 13 and 18 credit hours were studied and compared with students from the combined departments of history, El-Hadara, El-Dawa, Arabic language, and El-Qada. Three course load categories were evaluated, 13 to 14 credit hours, 15 to 16 hours, and 17 to 18 hours. There were significant differences between the mean GPAs of the three course load categories for both comparison groups. For the Shariah departments, the mean GPA for students undertaking 13 to 14 credit hours was higher than the mean GPA for students undertaking 15 to 16 credit hours. On the other hand, students taking 17 to 18 credit hours had higher GPAs than did students taking 13 to 14 or 15 to 16 credit hours. For the comparison group of five departments, the increase in course load was associated with an increase of GPAs. Overall, students taking course loads from 13 to 16 credit hours did not differ much in GPAs. It is suggested that when comparing GPAs of students taking course loads from 13 to 18 credit hours, it is the course load of 17 to 18 credit hours where the differences between students tends to be more visible. These findings reinforce conclusions drawn from a 1980 student (Ahmed Shami, et al.) which suggest that as the course loads increase, GPAs also increase. It is recommended that a study be conducted to determine whether GPAs affect the course loads students undertake. (SW)

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RELATIONSHIP OF STUDENTS COURSE LOADS WITH THEIR GRADE POINT AVERAGE SCORES — STUDY II

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By:

Dr. Abdullah Mohammad Zakir Khouj.

Dr. Mohammad Ansar Ahmed Shami.

AN OCCASSIONAL RESEARCH PAPER

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Center For Research In Education and Psychology,

College of Education,

Umm Al-Qura University,

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Relationship of Students Course Loads With Their Grade Point Average Scores —— Study II

Introduction:

In an earlier study regarding the relationship of students course loads with their grade point average scores conducted for various departments of College of Shariah at Makkah Campus, Shami, Abo-Laban and Shami [1] devided the students of every department according to their course loads into the following three groups: Group A: earning eleven credit hours and less; Group B: earning credit hours between 12 and 17; and Group C: earning credit hours 18 and more. For each department they analyzed the date to determine the significance of difference in the mean grade point average (GPA) scores of various groups. They found that the mean GPA's increased from group A to B and from B to C and the differences between mean GPA's were mostly statistically significant. These findings surprised some and others felt that the findings were as expected. Those who got surprised, were expecting that beyond some amount of the course load of students, the relationship between the course loads and the GPA's of students would become negative. Where as those who showed no surprise indicated that their experience showed that the bright students tended to take greater course loads, and the academically poor and those who were on probation tended to take less course loads. Therefore this group felt that because of differential ability levels of students associated with the course load categories mean GPA's were found to be increasing with the corresponding increase in the course load.

The group which showed no surprise, suggested that the relationship between course loads and grade point averages of the students would be better discovered if the students falling on the extremes of course load continuum were excluded. Following this suggestion the study underhand was conducted.

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(1) Ahmed Shami, Mohammad Ansar; And Others, Relationship of Students' Course Loads With Their Grade Point Average Scores, Office of Publicational Research, King Abdulaziz University, Makkah, Saudi Arabia. Jan. 80.
ERIC NO: ED202441.

Purpose:

The purpose of the study was to examine the relationship between course loads of students and their grade point average (GPA) scores after excluding students who take very high course loads and who take very little course load.

Procedures:

Selection of Subjects:

Students who enrolled for more than 18 credit hours were considered having very high course load and those who enrolled in less than 13 credit hours were considered as having very little course load. These students were excluded from the study.

Only those students from all six departments of College of Shariah who earned course load from 13 to 18 credit hours were included in the study.

Data Collection:

For every student included in the study the number of credit hours he earned and his GPA for the first semester of year 1978-79 were obtained. This information was gathered from the students' records maintained in the registerar's office.

Data Analysis:

Students from every department were classified into the following three course load categories; those who earned from 13 to 14 credit hours; those who earned from 15 to 16 credit hours; and those who earned from 17 - 18 credit hours. This classification revealed that in case of certain departments the number of students falling in certain course load categories was small and it was not advisable to conduct the data analysis by department level. Consequently the students from the departments of History, El-Hadara, El-Dawa, Arabic Language and El-Qada were combined to form one group and students from the department of Shariah with quite high enrolment were treated as another group for data analysis. For each of these groups students were classified into the three categories of course load referred earlier and the significance of difference between the mean GPA's of students falling

within corrse load categories were tested by analysis of variance. After the analysis of variance, whenever the F ratio was significant Scheffe's t test was applied to determine the significance of difference between the means of every combination of two course load categories.

Results:

The results of the data analysis are presented in the following pages. For convenience sake from hereon the study will refer to course load categories as follows:

Category A : Course load from 13 to 14 credit hours.
Category B : Course load from 15 to 16 credit hours.
Category C : Course load from 17 to 18 credit hours.

Departments of History, El-Hadara, El-Dawa, Arabic Language and El-Qada:

The number of students falling within three course load categories from the departments noted above, and the mean GPA's and standard deviations for each of these categories are given below.

TABLE I.

	Course Load Categories		
	A	B	C
Number of Students	37	43	104
Mean GPA	2.32	2.56	2.72
Standard Deviation	0.61	0.63	0.54

The analysis of variance conducted for the departments noted above provided results given in Table II below.

TABLE II.

Analysis of variance conducted for five Department of College of Shariah.

Sources	Sum of Squares	Degrees of Freedom	Mean Square	F Value
Between	2.76	2	1.38	4.01
Within	62.268	181	0.344	
Total	65.02			

The F value is significant at .05 level. Consequently Scheffe's[2] t test was applied to examine the significance of difference between mean GPAs of every combination of two course load categories. The results are provided in Table III.

TABLE III.

Results of Scheffe's t test application.

Course Load Categories	F Value	Significance Level
A & B	1.669	Not Significant
B & C	1.132	Not Significant
A & C	6.349	Significant at .005 level

The t test analysis shows that the differences between the groups A and C are highly significant and differences between groups B & C and groups A and B are not significant.

Shariah:

The number of students falling within three course load categories for the department of Shariah, and mean GPAs and standard deviations for each of these categories are given below.

TABLE IV.

	Course Load Categories		
	A	B	C
Number of Students	29	41	114
Mean GPA	2.63	2.56	2.87
Standard Deviation	0.69	0.50	0.496

The results of analysis of variance conducted for the department of Shariah are given in Table V.

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2. Weinberg, Sharon L; and Goldberg, Kenneth P., Basic Statistics for Education and Behavioral Sciences, Houghton Mifflin Company, Boston, 1979, pp.364.

TABLE V.

Analysis of Variance for the Department of Shariah.

Sources	Sum of Squares	Degrees of Freedom	Mean Square	F Value
Between	3.23	2	1.615	5.59
Within	52.25	181	0.2887	
Total	55.48			

The F value is significant at .01 level. Consequently Scheffe's t test was applied to examine the significance of difference between mean GPAs of every combination of two course load categories. The results of t test are presented in Table VI.

TABLE VI.

Results of Scheffe's t test applications

Course Load Categories	F Value	Significance Level
A & B	.14416	Not Significant
B & C	5.0314	Significant at .01 level.
A & C	2.313	Not Significant

The application of t test shows that the differences between the mean GPAs of groups B and C were significant at .01 level whereas the differences between mean GPAs of A and C; and A & B are not significant.

Discussion:

The results reported earlier revealed that the differences between the mean GPAs of the three course load categories of the department of Shariah and other five departments taken together were statistically significant.

Also the increase in course load was associated with the increase in GPAs of group of five departments only. For the department of Shariah the mean GPA for the course load category of A (from 13 to 14 credit hours) was higher than the course load category B (from 15 to 16 credit hours) and the mean GPA of course load category C (from 17 to 18 credit hours) was

higher than both categories of A and B. However for the group of five departments and for Shariah department the differences between means of categories A and B were non-significant. This indicates that in the College of Shariah so far as the grade point average is concerned the students taking course loads from 13 to 16 credit hours do not tend to differ much. Furthermore, since the mean GPA of course load category C differed significantly from both A and B categories for Shariah department and for the group of five departments, this indicates that the students taking course loads from 17 to 18 credit hours do tend to differ from students in the categories of A and B. On the basis of these findings, it can be stated that, in general, while comparing GPA's of students taking course loads from 13 to 18 credit hours, it is the course load of 17 to 18 credit hours where the differences between students tend to be more visible.

This study also found that for the group of five departments as the course load increased from one category to another the GPA's of students also increased. For the department of Shariah the mean GPA of students in category C was higher than the meansofof categories A and B. These findings reinforce the conclusions drawn in an earlier study by Shami, Abo-Laban and Shami, referred in the introductory section of this paper that as the course loads increase GPA's also increase.

The writers do not visualize any rational basis to project that the findings of this study help establish any causal effect of course load on the GPAs of students. Rather it can be hypothesized that it may be GPA's which might affect the course loads students take. Therefore it is recommended that a study considering GPA's of students as independent variable and the course loads students take as dependent variable should be conducted to test this hypothesis.